

FEDERAL GRANT OPPORTUNITIES

updated 5/21/10

new opportunities or changes highlighted

Open grants & deadlines:

- **FY 2009 Global Climate Change Mitigation Incentive Fund (GCCMIF)**
- **Federal Loan Guarantees for Projects that Employ Innovative Energy Efficiency, Renewable Energy, & Advanced Transmission & Distribution Technologies** *(September 14, 2009-August 24, 2010; November 13, 2009-December 31, 2010)*
- **Weatherization Innovation Pilot Program** *(June 2, 2010)*
- **High Impact Supply Chain R&D for PV Technologies and Systems** *(July 2, 2010)*
- **Photovoltaic (PV) Manufacturing Initiative** *(Concept Paper due June 3, 2010)*
- **Smart Grid Research, Development, and Demonstration** *(June 22, 2010)*
- **Co-Production of Power, Fuels, and Chemicals via Coal/Biomass Mixtures** *(May 28, 2010)*
- **Research and Development for Next Generation Nuclear Physics Accelerator Facilities** *(June 8, 2010)*
- **Renewable Energy Systems and Energy Efficiency Improvements** *(June 30, 2010)*
- **National Administrator of the Solar Instructor Training Network** *(June 15, 2010)*
- **Geothermal Energy Production from: (A) Low-Temperature Resources; (B) Coproduced Fluids; and (C) Geopressured Resources** *(July 9, 2010)*
- **Genomic Science and Technology for Energy and the Environment** *(Pre-Application: June 28, 2010 & Application: September 10, 2010)*

- **FY 2009 Global Climate Change Mitigation Incentive Fund (GCCMIF)**

- Applications due: Rolling basis
- Visit <http://www.eda.gov/> for additional information and for any programming changes
- GCCMIF established to strengthen the link between economic development and environmental quality
- GCCMIF finances projects that foster economic development by advancing the green economy in distressed communities
- Applications are competitive, based on the Economic Development Association's standard eligibility and distress criteria, investment policy guidelines, and funding priority considerations
- Projects must achieve the same job and capital investment outcomes as traditional EDA investments
- Project must be one of the following:
 - Renewable energy (wind, solar, biomass, and geothermal)
 - Energy efficiency
 - Reuse/Recycling/Restoration (reuse of a given product or production of a new or innovative product for recyclable materials; also includes ecosystem restoration)
 - Green building (new construction or renovation certified by USGBC in LEED or comparable certificate program)
- Must result with outputs:
 - Development and/or manufacture of green end-product that furthers or contributes to sustainability and/or environmental quality (activity, item, plan, or program)
 - Greening of an existing function or process (investments that result in green enhancements to the resource, energy, water, and/or waste efficiency of an existing function or process)
 - Creation or renovation of a green building

ARRA - Federal Loan Guarantees for Projects that Employ Innovative Energy Efficiency, Renewable Energy, & Advanced Transmission & Distribution Technologies

Funding Opportunity Announcement (FOA) # DE-FOA-0000140

- Application due dates:
 - Parts I & II submission dates depend on rounds
 - Part I: September 14, 2009 – August 24, 2010
 - Part II: November 13, 2009 – December 31, 2010
- Submission of applications for loan guarantees under Title XVII of the Energy Policy Act of 2005 in support of debt financing for projects in the U.S. that employ energy efficiency, renewable energy, and advanced transmission and distribution technologies that constitute new or significantly improved technologies that are not a commercial technology
- DOE will make up to \$8.5 billion in loan guarantee authority available
- Despite the due dates, the solicitation will remain open until the aggregate \$8.5 billion in loan guarantee authority is fully obligated
- Visit <http://www.fedconnect.net/> to view the full FOA, and consult <http://www.energy.gov/>, <http://www.whitehouse.gov/omb/> or <http://www.recovery.gov/> for additional information
- Only 3 categories of projects that begin construction no later than 9/30/11 are eligible under Section 1705 of Title XVII and may have their credit subsidy costs covered by appropriated funds under the Recovery Act
 1. Renewable energy systems, including incremental hydropower, that generate electricity or thermal energy and facilities that manufacture related components
 2. Electric power transmission system projects, including upgrading projects
 3. Leading edge biofuel projects that will use technologies performing at the pilot or demonstration scale that the Secretary determines are likely to become commercial technologies and will produce transportation fuels that substantially reduce life-cycle greenhouse gas emissions compared to other transportation fuels
- Eligible projects in categories listed below and which fall within 1 of the 2 distinct project types described:
 1. Alternative fuel vehicles
 2. Biomass
 3. Efficient electricity transmission, distribution, and storage
 4. Energy efficient building technologies and applications
 5. Geothermal
 6. Hydrogen and fuel cell technologies
 7. Energy efficiency projects
 8. Solar
 9. Wind & hydropower

- Technology categories for 1705 eligible projects are limited to renewable energy systems projects, electric power transmission systems projects, and leading edge biofuels projects
- Per DOE, eligible projects under categories 1, 4, 6, & 7 generally do not constitute 1705 eligible projects for which the credit subsidy costs may be paid for out of funds appropriated under the Recovery Act to pay for the costs of loan guarantee issued under the Section 1705 program
- Project types: manufacturing or stand-alone; see FOA for list of primary goals and objectives for these project types

Weatherization Innovation Pilot Program

DE-FOA-00000309

- Application Due Date: June 2, 2010
- Registration Requirements
 - Applicants must obtain a DUNS number. <http://fedgov.dnb.com/webform>
 - Applicants must register with the CCR. <http://www.ccr.gov/>
 - Applicants must register with Grants.gov. <http://grants.gov/>
 - Applicants must register with FedConnect www.fedconnect.net
- Estimated Funding: Approximately \$30 million is expected to be available for new awards.
 - Ceiling: \$3 million
 - Floor: none
 - Expected Number of Awards: 10-15
 - Period of Performance: 2 years
 - No cost sharing
- Eligible Applicants: DOE is seeking partnerships with traditional and non-traditional weatherization providers including: states and units of local government; non-profit entities such as community development organizations; for-profit entities; institutions of higher education; Indian tribe economic development entities; and, consortia of these entities. All types of these entities are eligible to apply, except other Federal agencies, Federally Funded Research and Development Center (FFRDC) Contractors, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995.
- Objectives: providing grants for innovative ways to weatherize homes of low-income families. It will focus on the following objectives:
 - Including new and non-traditional providers and developing new partnerships. Partnerships may involve non-traditional and existing WAP network providers.
 - Leveraging financial resources in addition to Federal funds.
 - Improving the effectiveness of low-income weatherization through the use of new materials, technologies, behavior-change models, and/or processes. Metrics for improving effectiveness include increasing the number of homes weatherized, reducing cost per weatherized home, increasing energy cost savings per home, increasing jobs created and retained, and reducing greenhouse gas emissions.
- Successful applicants must include reliable methods and means of monitoring and verifying energy savings. In addition, DOE will be conducting a formal independent evaluation of the projects; all grantees under this FOA will be expected to provide information for this assessment.
- Applicant must include their plan for monitoring and evaluating work completed under this grant, including on-site inspections or other means, to ensure the effective provision of weatherization assistance for the dwelling units of the low-income persons.
- Must include, the funding necessary for any training and technical assistance as part of the project budget, as appropriate.
- Must include as part of the application package a Project Impact table that describes the quantitative impact of their project

High Impact Supply Chain R&D for PV Technologies and Systems

DE-FOA-0000234

- Application Due Date: July 2, 2010
- Registration Requirements
 - Applicants must obtain a DUNS number. <http://fedgov.dnb.com/webform>
 - Applicants must register with the CCR. <http://www.ccr.gov/>
 - Applicants must register with Grants.gov. <http://grants.gov/>
 - Applicants must register with FedConnect. www.fedconnect.net
- Estimated Funding
 - Amount Multiple Year Awards: Approximately \$30-40 million in funding is expected to be available. \$10,000,000 is expected to be available for new awards in FY 2010, with additional funding expected to be available for awards made under this announcement in years FY 2011 up to FY2013. All funding is subject to the availability of funds.
 - Expected Awards: 5-10 with 36 month performance period.
- Maximum and Minimum Award Size
 - Ceiling (i.e., the estimated maximum amount of federal funds for an individual award made under this announcement): \$ 4,800,000 (\$1.6 million per year for three years).
 - Floor (i.e., the estimated minimum amount of federal funds for an individual award made under this announcement): \$600,000 (\$300,000 per year for two years)
 - Expected Award Size (i.e., the anticipated amount of federal funds for an individual award made under this announcement): \$ 3,000,000 (\$1.0 million per year for three years).
- Eligible Applicants: All types of domestic entities, including DOE/NNSA National Laboratory Contractors, are eligible to apply, except other Federal agencies, non-DOE Federally Funded Research and Development Center (FFRDC) Contractors, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995.
- Cost Sharing While cost share of 50% is desired, the required cost share must be at least 20% of the total allowable costs of the project (i.e., the sum of the Government share, including FFRDC contractor costs if applicable, and the recipient share of allowable costs equals the total allowable costs of the project) and must come from non-Federal sources unless otherwise allowed by law. (See 10 CFR Part 600 for the applicable cost sharing requirements.)
- Objective: identify and accelerate the development of cross-cutting and unique products or processes that are expected to have a disruptive impact on the photovoltaics (PV) industry
- Priorities:
 - Increasing the overall PV system efficiency and lowering the total manufacturing costs are essential for the success of the SETP plans.
 - Program activities are currently bringing emerging technologies and manufacturing processes to market.
 - The program focus is primarily on accelerating product and process development at the product level, whether cell, module or system.
 - Successfully developing technologies, implementing economies of scale, and vertically integrating the business structure to drive down costs.
- Project Objectives
 - This opportunity presumes the existence of a wealth of applicable technologies from industries and companies outside the PV industry that could be optimized for domestic PV-specific manufacturing methods and products.]

- Successful applicants to this FOA will propose an R&D project based on a concept, process, or prototype, which has been demonstrated at a pre-commercial scale, and show how this technology has significant potential for near-term impact on a substantial segment of the PV industry.
- Successful applicants will also describe how they plan to bring the technology they develop under the award to market within 1–3 years from the date of award and within the time span of the award.
- Cross-cutting cost reduction opportunities developed in the U.S. that will provide a generic benefit across a segment of the PV industry.
- Scope: Research and Development projects for research, evaluation, verification, and/or testing. Innovation in the PV supply chain covers a very broad range of topics. Possible topics are listed below.
 - Note: The following items are for illustration purposes only and do not restrict the research encouraged under this FOA.
 - Flexible barrier or protective coatings
 - Transparent conductors (new materials or deposition)
 - Contacts (high aspect ratio, non-contact, non-silver)
 - High performance glass (low emissivity, high transmission, high temp., low soiling)
 - Thermal solutions (concentrating photovoltaic (CPV) heat sinks, infrared rejection)
 - Light trapping (for very thin cells, alternative cell structures)
 - Adhesives/Encapsulants (faster processing, flexibility)
 - Next Generation Power Controllers and Components
 - Streamlined diagnostic tools for PV solar system operation
 - Advanced PV solar manufacturing equipment
 - Broadly applicable in-situ instrumentation
 - Materials recycling
 - All equipment supplier aspects of feedstock, wafer, cell, and module fabrication or assembly
 - Non-module supply chain technologies

Photovoltaic (PV) Manufacturing Initiative

DE-FOA-0000237

- Concept Paper Application Due Date: June 3, 2010
- Registration Requirements
 - Applicants must obtain a DUNS number. <http://fedgov.dnb.com/webform>
 - Applicants must register with the CCR. <http://www.ccr.gov/>
 - Applicants must register with Grants.gov. <http://grants.gov/>
 - Applicants must register with FedConnect. www.fedconnect.net
- Type of Agreement: DOE anticipates awarding cooperative agreements (See Part VI.B.4 Statement of Substantial Involvement), or Technology Investment Agreements (TIAs) under this announcement.
- Estimated Funding: Approximately \$125,000,000 is expected to be available for new awards under this announcement over five years. Approximately \$15,000,000 is expected to be available for new awards in FY 2010 and an additional \$110,000,000 is expected to be available for awards made under this announcement in years FY 2011 through FY2015.
 - DOE anticipates making at least two, and up to five, awards under this announcement depending on the size of the awards.
 - Award size: University Focused: \$12.5M-\$25M, Industry Focused: \$33M-\$100M
- Eligible Applicants: The following domestic entities are eligible to apply under both topic areas for this announcement: (1) institutions of higher education; (2) nonprofit and for-profit private entities; (3) State and local governments; and (4) consortia of entities (1) through (3). All types of domestic entities are eligible to apply, except other Federal agencies, Federally Funded Research and Development Center (FFRDC) Contractors, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995.
- Cost Sharing
 - Topic I: University-Focused - The cost share must be at least 20% of the total allowable costs for research and development projects (i.e., the sum of the Government share, including FFRDC contractor costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-Federal sources unless otherwise allowed by law. (See 10 C.F.R. Part 600 for the applicable cost sharing requirements.) The mandatory cost share must be achieved on an annual basis.
 - Topic II: Industry-Focused - The cost share must be at least 50% of the total allowable costs (i.e., the sum of the Government share, including FFRDC contractor costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-Federal sources unless otherwise allowed by law.
- Objectives: launch a PV Manufacturing Initiative that will support accelerated development for the U.S. PV industry. Applications under two separate topics are being sought in 2 areas:
 - University-Focused: designed to allow Universities to conduct industry-relevant research and development projects related to PV manufacturing. The University-Focused topic is intended to provide universities with a competitive funding source to perform industry-relevant R&D, guided by direct industry input and oversight.
 - Industry-Focused: designed to allow Industry to accelerate the development and implementation of PV manufacturing-related technologies through both collaborative and non-collaborative models. Intended to provide the U.S. PV industry with a resource to rapidly develop pre-competitive and competitive manufacturing technologies.

- The Industry-Focused topic is intended to also allow for the integration of university and workforce development initiatives; likewise, activities under the University-Focused topic are intended to have explicit industry support.

Smart Grid Research, Development, and Demonstration

DE-FOA-0000313

- Application Due: June 22, 2010
- Registration Requirements
 - Applicants must obtain a DUNS number. <http://fedgov.dnb.com/webform>
 - Applicants must register with the CCR. <http://www.ccr.gov/>
 - Applicants must register with Grants.gov. <http://grants.gov/>
 - Applicants must register with FedConnect. www.fedconnect.net
- Estimated Funding: Approximately \$30,000,000 in DOE funding is expected
 - Ceiling (i.e., the maximum amount for an individual award made under this announcement): \$6,000,000 for Area of Interest 1, \$3,000,000 for Areas of Interest 2 and 3 (DOE Share)
 - Floor (i.e., the minimum amount for an individual award made under this announcement): \$ 500,000 for all areas of interest (DOE Share)
- Expected Awards (3-5 year performance)
 - Area of Interest 1: Three awards \$500,000 to \$6,000,000
 - Area of Interest 2: Four awards \$500,000 to \$3,000,000
 - Area of Interest 3: Four awards \$500,000 to \$3,000,000
- Eligible Applicants: All types of entities are eligible to apply, except other Federal agencies, Federally Funded Research and Development Center (FFRDC) Contractors, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995.
- Cost Sharing: The cost share must be at least 20% of the total allowable costs for research and development and at least 50% of the total allowable costs for demonstration projects (i.e., the sum of the Government share and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-Federal sources unless otherwise allowed by law. (See 10 CFR part 600 for the applicable cost sharing requirements.)
- Objective of this announcement is to select projects that will support achieving the Smart Grid 2030 Targets of:
 - 20% reduction in the nation's peak demand
 - 100% availability to serve all critical loads at all times and a range of reliability services for other loads
 - 40% improvement in system efficiency and asset utilization to achieve a load factor of 70%
 - 20% of electricity capacity from distributed and renewable energy sources (200 GW)
- Areas of Interest
 - Integrated distribution management systems (DMS) are needed for a more flexible, automated, and self-healing grid with many distributed energy resources (DER) to achieve the Smart Grid 2030 Target of grid reliability and resilience.
 - Area of Interest 1 should discuss how the proposed integrated DMS will meet the following general requirements:
 - Management and forecasting of demand response, distributed generation, and storage resources
 - Dispatch of active and reactive power (through aggregation of DER) for optimization

- of losses and voltage profile
- Optimal operation of voltage control and distribution automation
- Detection, isolation, and response to faults, vulnerabilities, and threats
- State estimation to facilitate accurate and near real-time reliability and security assessment
- Integration of network models, market models, and renewable resource models
- Area of Interest 2: Advanced sensing, monitoring, and control technologies for enhanced asset utilization and grid reliability.
 - Prognostic Health Management (PHM): PHM technologies are sought to increase the reliability of the grid and the lifetime of the assets themselves.
 - Distribution System Sensing: Distributed sensors are needed to improve the detection and isolation of system power quality issues, faults, and equipment failure.
- Area of Interest 3: Voltage regulation and overvoltage protection for high penetration of renewable generation.
 - Standards-conforming voltage regulation and protection coordination schemes are critically important for achieving the Smart Grid 2030 Target of high penetration levels of distributed and renewable energy generation.

Co-Production of Power, Fuels, and Chemicals via Coal/Biomass Mixtures

DE-FOA-0000240

- Application Due Date: 05/28/2010
- Registration Requirements
 - Applicants must obtain a DUNS number. <http://fedgov.dnb.com/webform>
 - Applicants must register with the CCR. <http://www.ccr.gov/>
 - Applicants must register with Grants.gov. <http://grants.gov/>
 - Applicants must register with FedConnect. www.fedconnect.net
- Estimate Funding: Approximately \$4,500,000 is expected (no ceiling or floor)
- Expected Number of Awards and Size:
 - Area 1: 1-2, \$1,000,000 with 3 year period of performance
 - Area 2: 1-2, \$1,000,000 with 3 year period of performance
 - Area 3: 3-4, \$450,000 with 1 year period of performance
- Eligible Applicants: All types of entities are eligible to apply, except other Federal agencies, Federally Funded Research and Development Center (FFRDC) Contractors, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995.
- Cost Sharing: The cost share must be at least 20% of the total allowable costs for research and development projects (i.e., the sum of the Government share, including FFRDC contractor costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-Federal sources unless otherwise allowed by law. (See 10 CFR part 600 for the applicable cost sharing requirements.)
- Objectives;
 - Support the NETL Fuels/Hydrogen Program Area goal to develop advanced and novel technologies that will ensure the use of our nation's abundant coal (and biomass) resources to produce affordable power, fuels and chemicals in a safe and environmentally clean manner.
 - Applications to this Funding opportunity announcement are sought for R&D projects that will address key challenges related to the utilization of coal-biomass mixtures for co-production of power and hydrogen, fuels, and/or chemicals.
 - Applicants may only respond to one topic per application.
 - Multiple applications from the same applicant are permitted and teaming within a single application is also permitted.
- Topic Area 1: Pre-processing and Conditioning of Coal/Biomass Mixtures for Simultaneous Co-Feeding Systems
 - Applications are sought for R&D to prepare and characterize coal and biomass mixtures (e.g. briquettes, slurries or other uniform mixed fuels) to a form that is transportable, storable, and will accommodate direct co-feeding into gasification systems (i.e. through the same feed inlets) that operate at temperatures and pressures typical of commercially available coal-fired gasifiers. (NOTE: Applications must address a combined fuel containing a blend of coal and biomass)
- Topic Area 2: Reactive Properties of coal/biomass mixed fuels.

- Applications are sought that define and measure key reactive properties of a wide variety of relevant mixed coal-biomass fuels that can be measured in small-scale laboratory experiments and/or used in science-based computational models to confidently predict their physical and chemical behavior in gasification systems. The experiments/models must, at a minimum, characterize the chemical kinetics and reaction mechanisms of coal-biomass mixed fuels. The models developed must incorporate a combination of the kinetics of coal as well as conditioned biomass products such as pellets or briquettes.
- Topic Area 3: Design concepts for Co-Production of Power, Fuels, and Chemicals
 - Applications are sought for the development of design concepts, incorporating advanced technologies, for the integrated, economically viable co-production of power and hydrogen, fuels, or chemicals from a single facility equipped with carbon capture and storage. The deliverables from these projects will be preliminary conceptual designs, techno-economic analyses that predict plant efficiency and cost of produced products, and environmental studies. These studies will assess the potential impacts of integrating emerging technologies in the co-production of power, fuels, and chemicals from coal or coal-biomass mixtures. They will help to establish costs, risks, potential economic performance, and environmental impacts of such facilities and identify commercial/market potential for their products.

Research and Development for Next Generation Nuclear Physics Accelerator Facilities

DE-FOA-0000339

- Application Due Date: 6/8/2010
- Where to Submit: Applications must be submitted through Grants.gov to be considered for award.
- Estimated Funding: It is anticipated that up to \$2,000,000 will be available for awards to be made in Fiscal Year 2011, and maintained in outyears, contingent on the availability of appropriated funds.
- Eligible Applicants: All types of domestic entities are eligible to apply as the lead institution, except other Federal agencies, Federally Funded Research and Development Center (FFRDC) Contractors, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995.
- Cost Sharing: None Required
- Program Objectives
 - The Nuclear Physics (NP) program supports a broad range of activities aimed at research and development (R&D) related to the science, engineering, and technology of heavy-ion, electron, and proton accelerators and associated systems.
 - Accelerator R&D described in this FOA supports efforts essential to develop strategies and technologies for next generation NP accelerator capabilities, whether they are needed for new facilities or major upgrades to existing facilities.
 - Accelerator R&D efforts described in this FOA do not include ongoing facility construction projects such as those associated with FRIB or the 12 GeV CEBAF Upgrade Project; these projects have their own designated accelerator R&D project funds to address key technical issues and are not part of this FOA.
 - This FOA is in support of pre-conceptual accelerator R&D aimed at technological challenges for the next generation NP facilities. Accelerator R&D intended for this announcement should fall in the following general categories:
 - Accelerator R&D with the potential for the development of future generation of NP accelerators not under construction or design.
 - Accelerator R&D with the potential for major upgrades to existing NP national user facilities that will lead to new capabilities.
 - Priority will be given to potential initiatives identified by the community as compelling, such as in the NSAC Long Range Plan for Nuclear Science. Relative to a potential electron-ion collider, community sponsored studies and workshops have identified a number of areas where focused R&D and prototyping could develop technical feasibility and advance pre-conceptual design, and priority will be given to these areas of study. The relative priority of R&D for next generation electron-ion collider facility was recently published in the 2009 EICAC report. Relevance of electron-ion collider efforts to the R&D priorities established in this report should be clearly articulated.

Renewable Energy Systems and Energy Efficiency Improvements

RDBCP-10-REAP-RES-EEI

- Applications Due: June 30, 2010
- For additional information and application information: <http://www.grants.gov/>
- Expected Number of Awards: 2000
- Estimated Total Program Funding: \$51,500,000
- Award Ceiling: \$500,000
- Award Floor: \$1500
- Cost Sharing or Matching Requirement: Yes
- Eligible Applicants: Eligible applicants are agricultural producers and rural small businesses. All agricultural producers, including farmers and ranchers, who gain 50% or more of their gross income from the agricultural operations are eligible. Small businesses that are located in a rural area can also apply. Rural electric cooperatives may also be eligible to apply. Additional Information on Eligibility: Citizenship - To be eligible, applicants must be individuals or entities at least 51 percent owned by persons who are either: 1) citizens of the United States (U.S.), the Republic of Palau, the Federated States of Micronesia, the Republic of the Marshall Islands, or American Samoa; or 2) legally admitted permanent residents residing in the U.S. Project - The project must be the purchase and installation or construction of a renewable energy system or energy efficiency improvement. Eligible projects include: retrofitting lighting or insulation, or purchasing or replacing equipment with more efficiency units. Eligible renewable energy projects include projects that produce energy from wind, solar, biomass, geothermal, hydro power and hydrogen-based sources. All projects must be located in a rural area, must be technically feasible, and must be owned by the applicant.. Legal authority and responsibility - Each applicant must have, or obtain, the legal authority necessary to carry out the purpose of the grant.
- Objectives: The Rural Energy for America Program will provide funds to agricultural producers and rural small businesses to purchase and install renewable energy systems and make energy efficiency improvements. The grants are awarded on a competitive basis and can be up to 25% of total eligible project costs. Grants are limited to \$500,000 for renewable energy systems and \$250,000 for energy efficiency improvements. Grant requests as low as \$2,500 for renewable energy systems and \$1,500 for energy efficiency improvements will be considered. At least 20% of the grant funds awarded must be for grants of \$20,000 or less.

National Administrator of the Solar Instructor Training Network

DE-FOA-0000228

- Application Due Date: 6/15/2010
 - Registration Requirements
 - Applicants must obtain a DUNS number. <http://fedgov.dnb.com/webform>
 - Applicants must register with the CCR. <http://www.ccr.gov/>
 - Applicants must register with Grants.gov. <http://grants.gov/>
 - Applicants must register with FedConnect. www.fedconnect.net
 - Cooperative Agreement: DOE anticipates awarding a cooperative agreement under this program announcement (See Part VI.B.4 Statement of Substantial Involvement).
 - Estimated Funding: Approximately \$3,000,000-\$4,500,000 is expected to be available. Approximately \$500,000 is expected to be available for a new award in FY 2010 and an additional \$600,000 – \$1,000,000 is expected to be available for awards made under this announcement in years FY 2011 through FY 2014.
 - Estimated Ceiling (i.e., the maximum amount for an individual award made under this announcement): \$4,500,000
 - Estimated Floor (i.e., the minimum amount for an individual award made under this announcement): \$3,000,000
 - DOE anticipates making one award under this announcement.
 - DOE anticipates that the award will be in the \$3,000,000 - \$4,500,000 range for the total project period.
 - DOE anticipates making one award that will run for five years.
 - Eligible Applicants: Domestic Entities Excluding Federal Agencies, FFRDC, and Nonprofit - 501(c)(4). The following domestic entities are eligible to apply for this announcement: (1) institutions of higher education; (2) nonprofit and for-profit entities; (3) State and local governments; and (4) consortia of entities (1) through (3). All types of domestic entities are eligible to apply, except other Federal agencies, Federally Funded Research and Development Center (FFRDC) Contractors, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995.
 - Cost Sharing: Cost sharing is encouraged, but not required.
- Objectives: With this FOA, DOE seeks to select a National Administrator, a central coordinating body which will serve the following main functions:
- Manage the collaboration of the Regional Resource and Training Providers (RTPs), coordinate their joint activities, and, where applicable, assist them in the completion of their project goals;
 - Work with a broad set of stakeholders, define and prioritize issues related to solar training and workforce development (some defined in Section 5.B.vi., below on Issue Areas). Develop and carry out a strategy – such as convening, facilitating and coordinating working groups which include the RTPs and other stakeholders – to address these issues; and
 - Serve as the national point of contact for the solar instructor training network, disseminating the working groups' products, and conducting other communication and outreach efforts such as providing recommendations to stakeholders for the acceptance and adoption of best practices.
 - The Recipient will be responsible for validating the findings of the working groups and integrating validated products and deliverables into the solar instructor training network and into the larger educational, training and workforce development infrastructure.

- During the course of the five-year project, the National Administrator and the RTPs will work together to ensure the success of the following expected outcomes:
- Development of a network which is responsive to the needs of employers and educators, and which integrates technology updates into its training programs and products;
- Increased capacity of educational providers, such as community colleges, career and technical education centers, trade unions and others to train workers in careers dealing with the PV and SHC installation process;
- Development and dissemination of products and deliverables such as model curricula according to occupation and experience level, lessons learned, and best practices;
- State and local government access to information and resources which aid those entities in understanding how solar training and workforce development interrelates with policy; and
- Inclusion of PV and SHC theory and application into educational, training and workforce development infrastructures.

Geothermal Energy Production from: (A) Low-Temperature Resources; (B) Coproduced Fluids; and (C) Geopressured Resources

DE-FOA-0000318

- Application Due: July 9, 2010 (go to <http://www.grants.gov> for more information)
- Registration Requirements
 - Applicants must obtain a DUNS number. <http://fedgov.dnb.com/webform>
 - Applicants must register with the CCR. <http://www.ccr.gov/>
 - Applicants must register with Grants.gov. <http://grants.gov/>
 - Applicants must register with FedConnect. www.fedconnect.net
- Estimated Funding: For all Topic Areas, approximately \$20M total is expected to be available for this FOA. \$10M is expected to be available for new awards in FY 2010 and an additional \$10M total is expected to be available for awards made under this announcement in years FY 2011 through FY2012 for Phase II and beyond.
- Anticipated Funding
 - Topic Area: A \$1,500,000 (Ceiling of \$750,000, no floor)
 - Topic Area: B \$1,500,000 (Ceiling of \$750,000, no floor)
 - Topic Area: C \$5,000,000 (Ceiling of \$750,000, no floor)
- Period of Performance: For all Topic Areas, DOE anticipates making awards that will continue for up to 36 months over two budget periods. The first budget period (Phase 1) is expected cover a period of 10 months with an option for Phase 2 and 3 activities to run for an additional 26 months, contingent upon renewal of the award following a competitive project review (down-select) planned for July 2011.
- Eligible Applicants: The following domestic entities are eligible to apply for this announcement as the prime applicant: (1) institutions of higher education; (2) nonprofit and for-profit private entities; and (3) State and local governments and (4) Federally Funded Research and Development Center (FFRDC) Contractors. Nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995 are not eligible.
- Cost Sharing: For all Topic Areas, the recipient cost share must be at least 20% of the total allowable costs for Phase 1, and 50% of the total allowable costs for Phases 2 and 3 of proposed projects and must come from non-Federal sources unless otherwise allowed by law. The sum of the Government share, including FFRDC contractor costs, if applicable, and the recipient share of allowable costs equals the total allowable cost of the project. (See 10 CFR Part 600 for the applicable cost sharing requirements.)
- Objectives: DOE hopes to expand its partnership with the geothermal community on geothermal systems research, demonstration, and development (RD&D) throughout the United States. The intent of this FOA is to evaluate the feasibility of and demonstrate energy production (technically and economically) from nonconventional geothermal resources in an innovative manner.
 - Topic Area A: Low-Temperature Geothermal Fluids at temperatures up to 300° Fahrenheit (F) or approximately 150° Celsius (C)
 - Topic Area B: Geothermal Fluids Coproduced from productive, unproductive, or marginal oil and/or gas wells; other hydrocarbon production; or mineral recovery/mining operations
 - Topic Area C: Geopressured Resources that show potential for economic recovery of heat, kinetic energy, and gas
- Projects will be funded under this FOA for Phase 1 only. However, applications for this FOA

should include detailed scope and budget information for all phases of the proposed project. A competitive down-selection process, in which award progress will be reviewed and rated accordingly by DOE, will occur upon completion of Phase 1 activities. Therefore, budget information by phase as well as cumulative figures must be provided within the application. Funding beyond Phase 1 of these awards is also subject to Congressional appropriations and availability of funds. Therefore, recipients of Phase 1 funding are not guaranteed funding beyond Phase 1 based on these factors.

- Phase 1: *Feasibility Study and Engineering Design and Permitting*
- Phase 2 – *Procurement, Installation, and Commissioning of Equipment*
- Phase 3 – *Operation & Maintenance (O&M)*

Genomic Science and Technology for Energy and the Environment

DE-FOA-0000368

- Pre-Application Due Date: June 28, 2010
- Application Due Date: September 10, 2010
- Registration Requirements: There are several one-time actions you must complete in order to submit an application through Grants.gov (e.g., obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number, register with the Central Contract Registry (CCR), register with the credential provider, and register with Grants.gov.
- Estimated Funding: up to \$10 million total will be available for multiple awards to be made in FY 2011. The number of awards will be contingent on satisfactory peer review, the availability of appropriated funds, and the size of the awards. Multiple year funding is expected. Applications may request project support for up to three years, with out-year support contingent on the availability of funds, progress of the research, and programmatic needs. Annual budgets are expected to range from \$250,000 to \$750,000 in total costs.
- Eligible Applicants: All types of entities are eligible to apply, except other Federal agencies, Federally Funded Research and Development Center (FFRDC) Contractors, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995.
- Cost Sharing: None Required
- Objective: receiving applications for research that supports the Genomics Science Program and addresses DOE's missions in energy and the environment in the following research areas:
 - Microbial Environmental Processes: To develop a systems-level understanding of the functional processes used by microbes and microbial consortia that link the internal metabolic processes of microbial species to their external biogeochemical activities;
 - Microbial and Plant Processes for Bioenergy: To develop new approaches that advance our understanding of the systems biology of plant and microbes in producing biofuels including the utilization of lignocellulosic biomass and microbial synthesis of advanced biofuel;
 - Characterizing Key Molecular Species, Events, and Multicellular Processes for Genomic Science: To develop innovative technology approaches to characterize biological processes and networks at the subcellular, cellular and multicellular levels.
- The proposed research is intended to fill critical knowledge gaps, including the exploration of high-risk approaches. BER also encourages the submission of innovative "high- risk" applications with potential for future high impact on Genomic Science Research. The probability of success and the risk-reward balance will be considered when making funding decisions.
- Applications must focus on one or more of the following research areas:
 - Approaches that identify and measure in real-time, the concentration(s), dynamics or spatial distribution of one or more important categories of biomolecular species such as metabolites, lipids and carbohydrates that are components of key processes and networks in cells and multicellular communities but currently cannot be quantitatively measured and spatially resolved with high precision.
 - Approaches that combine advances in two or more technologies to improve the identification and characterization of small populations of molecules or cell types in complex, heterogeneous systems.
 - Approaches that utilize a single or a combination of analytical and/or imaging techniques to simultaneously measure the real time dynamic behavior of two or more functionally important biomolecular species (particularly those that interact or are

coupled), with temporal resolution of milliseconds to minutes and spatial resolution of nanometer to millimeters.

- Advanced analytical and imaging technologies that characterize functional multicellular or multiorganism (e.g. microbial communities) systems in their natural environment. Approaches that can generate and integrate data from different spatial and temporal scales are encouraged.
- Approaches using advanced analytical and imaging technologies to determine the environmental variables that influence microbial community structure and function and the relationships between microbial community structure and functional heterogeneity.
- Organisms of Interest to DOE: Candidate microbial systems for study should comprise archaea, bacteria, algae and/or fungi in communities that mediate or catalyze processes that are of importance to bioenergy or environmental stewardship related to subsurface terrestrial biogeochemical processes.
- Genome or metagenome sequencing is outside the purview of this FOA.
- For more information go to www.grants.gov